

Work Order ID 52560

October 1, 2009 10:22:50 AM

Page 1

Item ID: D119-646-241
 Revision ID: B
 Item Name: Replacement Skidtube STD w/ Training Wearplates

Accept

Setup Start

Stop

Start Date: 10/05/2009 Start Qty: 1.00

Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan: MF

Date: 09-10-01

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3887	B								
IIN-D119-646	B								

100

0.00

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D119-646-241 CHG001

2/7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

0.00



Skidtubes

Skidtubes

Remove 45.3125" from D2500-1-190

Memo ~~cut tube (D2500-1-190) to~~

1- Bend FWD end of tube using Bender 1 and bend prog D3887 FWD per dwg D3887

2- Cut FWD end of tube as per dwg D3887. *Verify measurements*

~~3- Cut AFT end of tube as per dwg D3887.~~

4- Buff out marks left from bending, *debur ends*

~~5- Drill Aft cap pilot hole using DT _____ ***DO NOT OPEN TO FINISHED SIZE***~~

6- ~~Cleco DT _____~~ in position and install drill Jig DT *9477* drill X-bolt spacer pilot holes using 3/16" drill *10/11/09*

7- Drill FWD cap holes using DT *8215* Open FWD & AFT cap holes to 0.208"

8- Drill FWD holes, *holes must be bid out manually*

9- Drill Tow ring hole using DT _____ Open to finished size. *holes must be bid out manually*

~~10- Drill wearplate holes~~ *N/A*

11- Debur

DP

9-11-10

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Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

1 11/9/11/9

121

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

① BE09/11/09

122

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Does good 2

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
Skidtubes		0.00				1	149/11/9		
Skidtubes	Memo								
	1-Open crossbolt spacer holes to finished size.								
	2-Deburr crossbolt spacer holes as per Dwg D3887 and blow out chips from inside the tube								
140		0.00							
Skidtubes		0.00				1	149/11/9		
Skidtubes	Memo								
	1-Bond web in place as per Dwg D3887 & QSI 015. A/R <input type="checkbox"/> <input type="checkbox"/> Sikaflex-291 <input type="checkbox"/> 11/23/11 <input type="checkbox"/> <input type="checkbox"/> Sikaflex expire date: <input type="checkbox"/> 10/2/30 <input type="checkbox"/> Start: <input type="checkbox"/> 9/11/09 <input type="checkbox"/> Time: <input type="checkbox"/> 8:00 <input type="checkbox"/> Finish: <input type="checkbox"/> 9/11/11 <input type="checkbox"/> Time: <input type="checkbox"/> 2:30 <input type="checkbox"/> ***** (Adhere for 12 hours) *****								
	2- Countersink crossbolt spacer holes, and prepare tube for welding, deburr.								
	3- C'sink crossbolt spacer holes, and prepare tube for welding, deburr.								

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
160		0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/R <input type="checkbox"/> Aluminum Rod <input checked="" type="checkbox"/> <u>M111999</u> <u>BE</u> <u>09/11/12</u>								
	2-Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole.								
	3-Counterbore 5/16" x 0.750" deep as per Dwg D3887.								
	4- Deburr & Scribe batch # on Aft end of tube.								

W/O:		WORK ORDER CHANGES					
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Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	⇒ S 09/16/16			(40)	5		
180 QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00	⇒ S 09/16/16			(40)	5		
190 HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo	0.00 0.00	⇒ M 09/16/17			(X1)	0		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

8:45 AM
328°F
9:15 AM

⇒ M 09/14/17

(X1)

Ø

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

PK 09-12-9

Ø

240

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install wearplates as per Dwg D3887.

2-Inspect for foreign objects as per QSI 024

3 -Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R Sikaflex-240/-291

Sikaflex expire date:

11/12/15
10/10/08

⇒ M 09/12/10

(X1)

⇒ PTO

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09/14/10	241	Add 4 "NAS 1149C0332-R / M112314 when installing END-CAPS	gbl	09/12/10	4		

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Start Date: 10/05/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

250

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

27 8 Oct 10

70

255

Wing Walk as per dwg QSI005 4.4 Batch M112263

0.00



HandFinish

Memo

0.00

Hand Finishing

27 09 10 10

41

256

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

27 8 Oct 10

41

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Start Date: 10/05/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 10/26/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

PPP 52360

0.00

Packaging

Right

P24/12/14

270

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09.12.15

P 09/12-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

Page 1

October 1, 2009 10:22:50 AM

Work Order ID: 52560

Parent Item: D119-646-241RevB

Parent Item Name: Replacement Skidtube STD w/ Training Wearplates







Start Date: 10/05/2009

Required Date: 10/26/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2500-1-190RevU/R		Manufactured	No			110	Each	0.0000	1.0000			
						1550166				1	11/9/11/09	
Ext'n -1' Beam Tube 4"												
D3885-1RevB		Manufactured	No			140	Each	0.0000	1.0000			
						B 51845				1	11/9/11/09	
Standard Web												
D3903-1RevB		Manufactured	No			160	Each	126.0000	12.0000			
												
Spacer												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

126

51849

126

D3681-1RevA

Manufactured

No

160

Each

94.0000

8.0000



Spacer

12 85 09/11/09

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

20

51920

20

Main Warehouse

ST

74

47123

13

48178

61

D2855-3RevB

Manufactured

No

240

Each

0.0000

2.0000



Cap

x2

8 85 09/11/11

B52281 11/09/11/00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Start Date: 10/05/2009

Required Date: 10/26/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To-Pick	Qty Issued	Date Issued	Status
AN3C5A  Bolt		Purchased	No			240	Each	1,058.000	34.0000			

Handwritten: 400000

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

1058

111424

8

111707

69

112314

181

112489

100

112641

500

112720

200

Handwritten: x4 09/12/10

D3904-1RevB

Manufactured

No



Washer

240

Each

300.0000

16.0000



Warehouse

Location

Loc Qty

Loc Code

Main Warehouse

ST136

Handwritten: 12x => 1348374

300

51875

300

Handwritten: x4 09/12/10

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3672-1RevB  Phenolic Washer		Manufactured	No			240	Each	1,180.000	4.0000			

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

680

39275

19

42329

115

47628

546

Main Warehouse

ST117

500

51674

500

D3849-041RevB

Manufactured

No

240

Each

0.0000

1.0000



FWD WEARPLATE ASSY, STD/FLOAR GEAR

X1



B52401 24 09/12/10

D3849-043RevB

Manufactured

No

240

Each

0.0000

1.0000



AFT WEARPLATE ASSY, STD GEAR



B52402 24 09/12/10

W/O:		WORK ORDER CHANGES					
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AN3C46A  BOLT		Purchased	No			240	Each	93.0000	8.0000			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

93

106169

5

106176

9

11918

79

MS21043-3

Purchased

No

240

Each

5,267.000

8.0000

Nut

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

80

103691

80

Main Warehouse

ST

5187

111819

78

112243

133

12314

4976

x8 21 09/12/0

x8 21 09/12/0

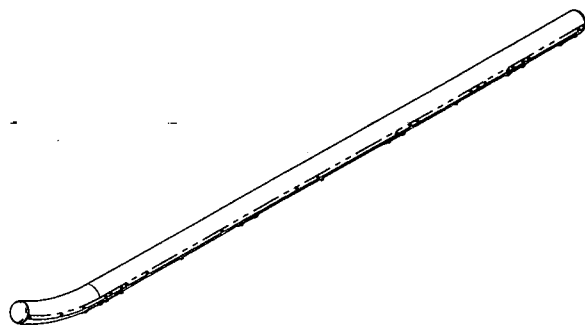
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D3887-041 STANDARD SKIDTUBE ASSY WITH WEARPAD (SHOWN)
D3887-043 STANDARD SKIDTUBE ASSY WITH WEAPLATE (SIMILAR)
D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE (SIMILAR)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSERTING D3885-1 WEB
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D3887-041 = 32.0 lbs
D3887-043 = 37.0 lbs
D3887-045 = 38.1 lbs
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 8.5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP
- 11) INSERT D3492-045 PLUG ASSY INTO Ø0.197 HOLES (BOTH SIDES OF TUBE)
- 12) USE DART DRILL TEMPLATE DT8931 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARPLATE INSERTS. INSTALL AELS-1032-130 INTO D3887-11 ONLY. INSTALL AN3C5A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.

ITEM	QTY -041	QTY -043	QTY -045	P/N	DESCRIPTION
1	X			D3887-041	STD SKIDTUBE ASSY WITH WEARPAD
2		X		D3887-043	STD SKIDTUBE ASSY WITH WEARPLATE
3			X	D3887-045	STD SKIDTUBE ASSY WITH TRAINING WEARPLATE
11	2	2	2	D2855-3	CAP ✓
12	16	16		D3492-045	PLUG ASSY
13	4	4	4	D3672-1	PHENOLIC WASHER ✓
14	8	8	8	D3681-1	SPACER ✓
15	5			D3846-1	GASKET
16	1			D3846-11	GASKET
17	5	5		D3847-1	WEARPAD
18	1	1		D3847-11	AFT WEARPAD
19		1		D3847-043	FWD WEARPLATE ASSY
20		1		D3847-045	CENTER WEARPLATE ASSY
21		1		D3847-047	AFT WEARPLATE ASSY
22			1	D3849-041	FWD TRAINING WEARPLATE ASSY ✓
23			1	D3849-043	AFT WEARPLATE ASSY
24	1	1	1	D3885-1	STANDARD WEB ✓
25	1	1		D3887-11	STANDARD SKIDTUBE
26			1	D3887-13	STANDARD SKIDTUBE
27	12	12	12	D3903-1	SPACER ✓
28			16	D3904-1	WASHER ✓
41	30	30		ALS4-1032-130	INSERT
42	34	34	4	AN3C5A	BOLT ✓ 34
43			8	AN3C46A	BOLT ✓
44	34	34		NAS1149C0332R	WASHER (OR AN960C10L)
45			8	MS21043-3	NUT ✓

\$52500

RELEASED
10/10/15

B	ALS4-1032-130 WAS AELS-1032-130, ZN C4-1, C5-7, C3-7, ADD DT8931, ZN A6-1; ADD 134.04, ZN C4-8, D2855-3 WAS D2575 (ZN D4-1, C7-2, C2-2, C7-3, C2-3, C7-4, C2-4); AN3C5A WAS AN3C4A (ZN C6-2, C2-2, C6-3, C2-3, C6-4, C2-4)	RF	09.06.30
A	NEW ISSUE	RF	09.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D3887	SHEET 1 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	A119 STD SKIDTUBE ASSY	NTS
DATE	09.06.30	COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

Dart Aerospace Ltd

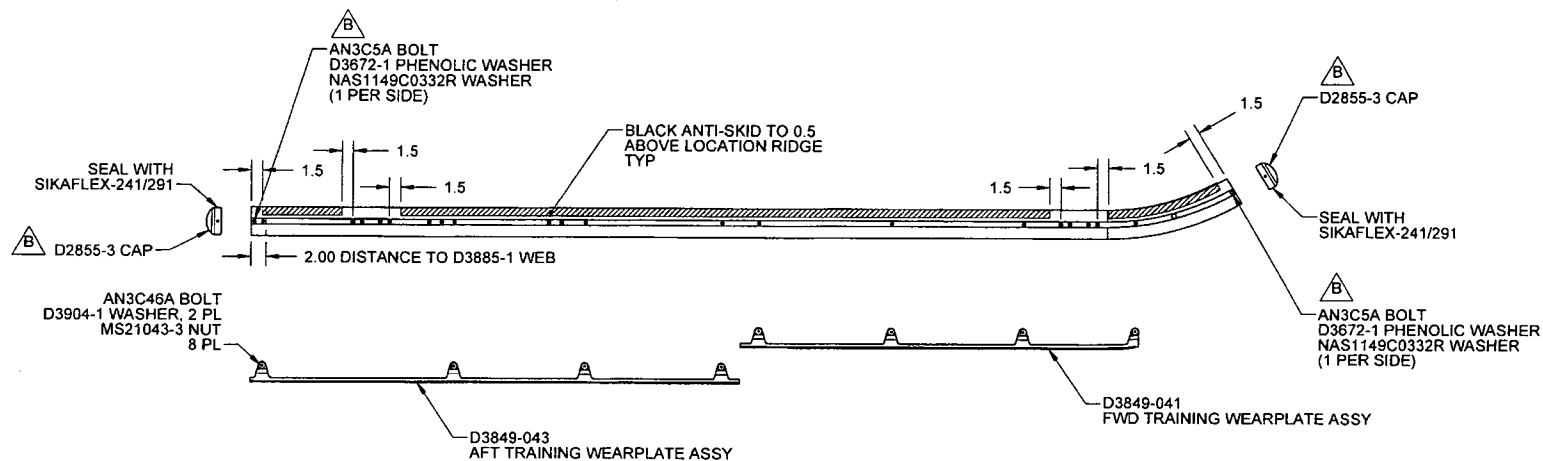
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3887-045 STANDARD SKIDTUBE ASSY WITH TRAINING WEARPLATE
(MAKE FROM D3387-13)

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10/17/15

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MFG APPR.	C	D3887	SHEET 4 OF 8
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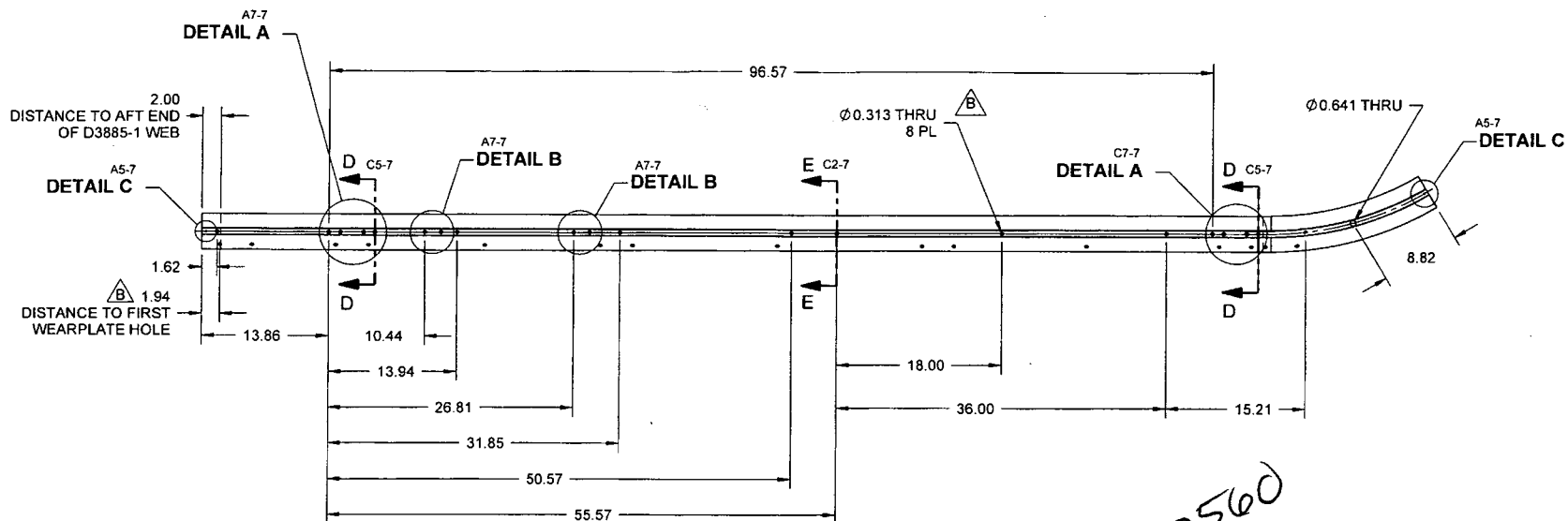
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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D3887-11 DRILLING DETAIL
(MAKE FROM D3887-1)

#52560

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09/15/00

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MFG. APPR.	RF	D3887	SHEET 5 OF 8
APPROVED	RF	TITLE	SCALE
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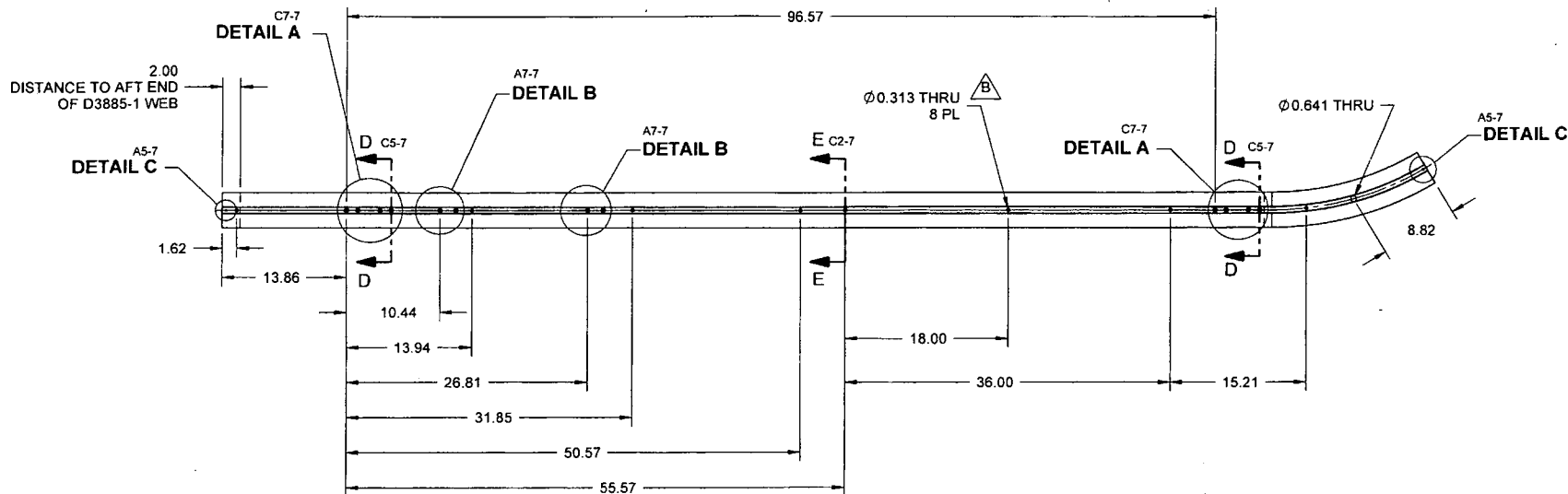
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3887-13 DRILLING DETAIL
(MAKE FROM D3887-1)

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216/15/13

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MFG. APPR.	RF	D3887	SHEET 6 OF 8
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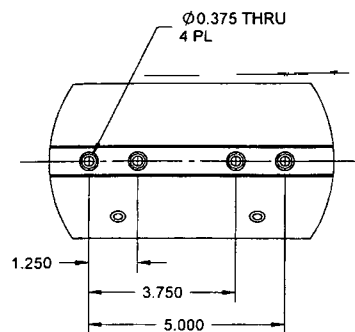
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

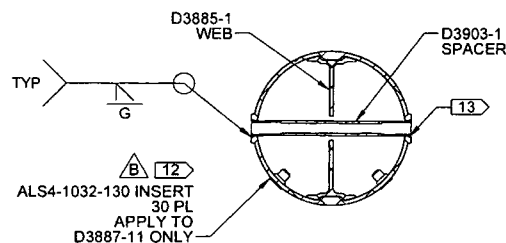
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

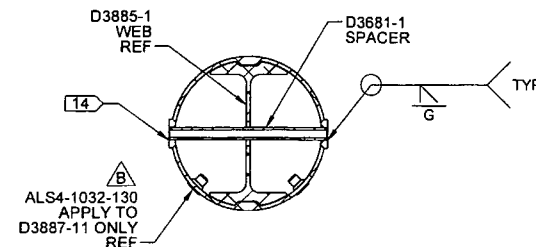
NOTE: Date & initial all entries



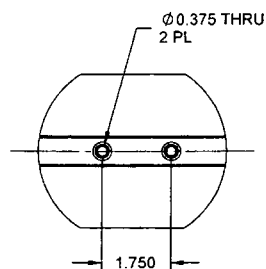
DETAIL A
SCALE 4X
D7-5
C3-5
D7-6
C3-6



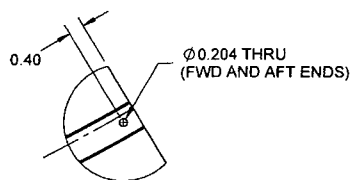
SECTION D-D
SCALE 4X
C7-5
C3-5
C7-6
C2-6
(FOR 12 X Ø0.375 HOLES
PER SKIDTUBE)



SECTION E-E
SCALE 4X
C4-5
C4-6
(FOR 8 X Ø0.313 HOLES
PER SKIDTUBE)



DETAIL B
SCALE 4X
C6-5
C5-5
C6-6
C1-6



DETAIL C
TYPICAL
SCALE 4X
C8-5
C1-5
C8-6
C1-6

#52560

NOTES:

13) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:

- i) CHAMFER HOLES Ø0.475 x 45°
- ii) INSERT D3903-1 SPACER
- iii) WELD INTO PLACE AND GRIND FLUSH
- iv) C'BORE TO 0.313 x 0.75 DEEP
- v) DEBURR HOLES

14) AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.313 HOLES ONLY:

- vi) CHAMFER HOLES Ø0.354 x 45° OR 0.050 DEEP x 45° (BOTH SIDES)
- vii) INSERT D3681-1 SPACER
- viii) WELD INTO PLACE AND GRIND FLUSH
- ix) DEBURR HOLES

RELEASED
2015/12/17

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MFG. APPR.	RF	D3887	SHEET 7 OF 8
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D

C

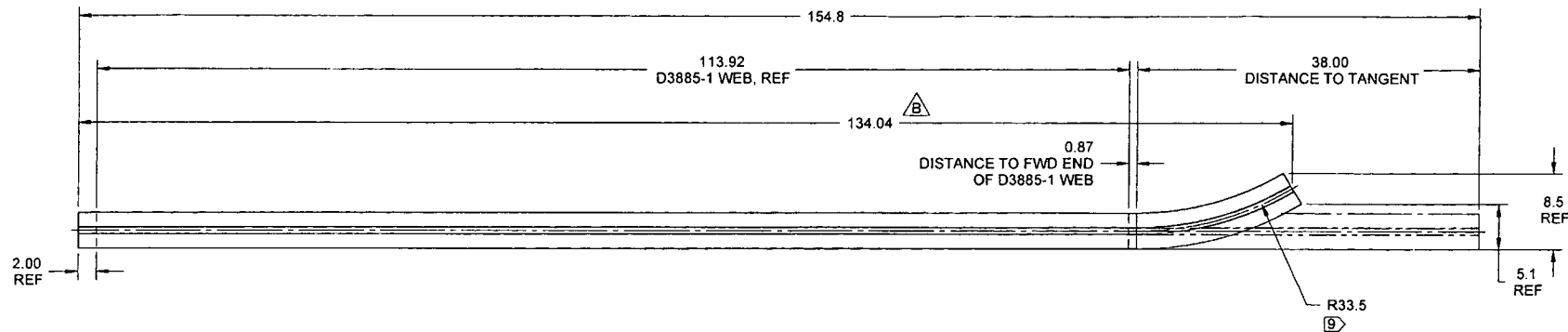
C

B

B

A

A



D3887-1 BEND DETAIL
(MAKE FROM D2500-1-190 EXTRUSION)

52560

RELEASED
09/07/15

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8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 217

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 52996
Part number: D119-646-243
Description: 119 skid tube
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat. Dymally Date of Test Coupon 09.11.16

Welder Barclay Elliott Date of Test Coupon 09.11.16

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

4.0 PARTS LIST

4.1 Standard Skidtubes

Item	Qty -011	Qty -012	Qty -111	Qty -112	Qty -211	Qty -212	Qty -041	Qty -141	Qty -151	Qty -241	Qty -251	Qty -311	Part Number	Description
	X												D119-646-011	STANDARD SKIDTUBE INSTALLATION WITH WEARPADS, LH
		X											D119-646-012	STANDARD SKIDTUBE INSTALLATION WITH WEARPADS, RH
			X										D119-646-111	STANDARD SKIDTUBE INSTALLATION WITH FULL LENGTH WEARPLATES & WEARPADS, LH
				X									D119-646-112	STANDARD SKIDTUBE INSTALLATION WITH FULL LENGTH WEARPLATES & WEARPADS, RH
					X								D119-646-211	STANDARD SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, LH
						X							D119-646-212	STANDARD SKIDTUBE INSTALLATION WITH TRAINING WEARPLATES, RH
	1	1					X						D119-646-041	REPLACEMENT STANDARD SKIDTUBE WITH WEARPADS
			1	1				X					D119-646-141	REPLACEMENT STANDARD SKIDTUBE WITH FULL LENGTH WEARPLATES & WEARPADS
									X				D119-646-151	WEARPLATE KIT STANDARD SKIDTUBE
					1	1				X			D119-646-241	REPLACEMENT STANDARD SKIDTUBE WITH TRAINING WEARPLATES
											X		D119-646-251	TRAINING WEARPLATES STANDARD SKIDTUBE
	1	1	1	1	1	1						X	D119-646-311	GROUND HANDLING KIT
1							1						D3887-041	STANDARD SKIDTUBE ASSY. WITH WEARPAD
20								1					D3887-043	STANDARD SKIDTUBE ASSY. WITH WEARPLATE & WEARPAD
26									1				D3847-043	FWD WEARPLATE ASSY
27									1				D3847-045	CENTER WEARPLATE ASSY
28									1				D3847-047	AFT WEARPLATE ASSY
29									5				D3847-1	WEARPAD
30									1				D3847-11	WEARPAD
31									30				AN3C5A	BOLT
32									30				AN960C10L	WASHER (OR NAS1149C0332R)
40										1			D3887-045	STANDARD SKIDTUBE ASSY. TRAINING WEARPLATE
44											1		D3849-041	FWD TRAINING WEARPLATE ASSY
45											1		D3849-043	AFT TRAINING WEARPLATE ASSY
51											16		D3904-1	WASHER
52											8		AN3C46A	BOLT
53											8		MS21043-3	NUT
60	2		2		2								D3883-1	SADDLE, OUTSIDE, LH
61		2		2		2							D3883-2	SADDLE, OUTSIDE, RH
62	2		2		2								D3884-1	SADDLE, INSIDE, LH
63		2		2		2							D3884-2	SADDLE, INSIDE, RH
64	16	16	16	16	16	16							D2652	BUSHING
65	8	8	8	8	8	8							AN3C50A	BOLT
66	12	12	12	12	12	12							AN4C6A	BOLT
67	8	8	8	8	8	8							MS21250-05006	BOLT
68	8	8	8	8	8	8							AN960C10L	WASHER (OR NAS1149C0332R)

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Revision: B
Date: 09.06.29

Item	Qty -011	Qty -012	Qty -111	Qty -112	Qty -211	Qty -212	Qty -041	Qty -141	Qty -151	Qty -241	Qty -251	Qty -311	Part Number	Description
69	24	24	24	24	24	24							AN960C416L	WASHER (OR NAS1149C0432R)
70	8	8	8	8	8	8							AN960C516L	WASHER (OR NAS1149C0532R)
71	8	8	8	8	8	8							MS21043-3	NUT
72	12	12	12	12	12	12							MS21043-4	NUT
73	12	12	12	12	12	12							D2712	SET SCREW
74	16	16	16	16	16	16							D3672-7	WASHER
75	24	24	24	24	24	24							D3672-3	WASHER
76	8	8	8	8	8	8							D3672-7	WASHER
80	1	1	1	1	1	1							D3407-041	TOW RING
81	1	1	1	1	1	1							D3417-5	WASHER
82	1	1	1	1	1	1							D3456-1	WASHER
83	1	1	1	1	1	1							MS21043-4	NUT
84	1	1	1	1	1	1							D3417-7	WASHER
90												2	D3886-041	LUG ASSEMBLY
91												8	D2652	BUSHING
92												4	AN3C46A	BOLT
93												4	AN960C10L	WASHER (OR NAS1149C0332R)
94												4	MS21043-3	NUT

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